

**Notice of Allowability**

Application No.

09/858,336

Examiner

Jin-Cheng Wang

Applicant(s)

PATTERSON ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/2/2005.
2. ☒ The allowed claim(s) is/are 9-14, 25-27 and 30-35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>4-203, 3-26-04, 10-12-04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material   | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

***Reasons for Allowance***

1. The following is an examiner's statement of reasons for allowance of claims 9-14 in the amendment A of 10/12/2004: Nothing in the prior art anticipates or suggests, "the image database associates the second identifier with the first identifier so as to associate the first image and the second image" in a method including a first image comprising a first identifier steganographically embedded therein, said method comprising: retrieving a copy of the first image from an image database, altering the copy of the first image to provide a second image, steganographically embedding a second identifier in the second image and providing the steganographically embedded second image to the image database for storage, wherein the image database associates the second identifier with the first identifier so as to associate the first image and the second image.

2. The cited reference Zhao teaches a method for managing images, the images including a first image comprising a first identifier steganographically embedded therein. *Zhao teaches retrieving the digital representation with the first fingerprint watermark stored in work storage 105 wherein the digital representation has hierarchies of watermarks, making it possible to use the watermark with digital representations such as the JPEG encoding of images and the MPEG encoding of motion pictures which are subject to compression and other processing during transmission; the Examiner interprets the work storage storing the digital representations such as the JPEG encoded images as an image database. Zhao teaches removing all but the two most recent fingerprint watermarks when it stores the revised digital representation in work storage 105 and thereby altering the copy of the first image. Zhao teaches steganographically embedding a plurality of the encryption keys including the new and old public*

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*watermarks, and/or secret owner identifier watermarks, and/or two symmetrical keys, in the modified digital representation before distribution to a new user. However, Zhao failed to disclose the claim limitation of “the image database associates the second identifier with the first identifier so as to associate the first image and the second image”.*

3. The following is an examiner's statement of reasons for allowance of claims 25, 27, 31 and 33 in the amendment A of 10/12/2004: Nothing in the prior art anticipates or suggests, “a gatekeeper to regulate the flow of at least a first image between the first user terminal and the second user terminal, wherein the first image comprises at least a first digital watermark including a first identifier, said gatekeeper to determine a security level associated with the first image, compare the first image security level with a user security level, and to allow access by the second user terminal to the first image based on a result of the comparison, wherein said gatekeeper comprises or communicates with a digital watermark decoder to decode the digital watermark to determine the first identifier, and to interrogate the database with the first identifier to retrieve the security level” in a system comprising: a first user terminal, a second user terminal; a database, wherein the first user terminal and the second user terminal are in communication, and the first user terminal and the second user terminal are each in communication with the database; and a gatekeeper to regulate the flow of at least a first image between the first user terminal and the second user terminal, wherein the first image comprises at least a first digital watermark including a first identifier, said gatekeeper to determine a security level associated with the first image, compare the first image security level with a user security level, and to allow access by the second user terminal to the first image based on a result of the comparison, wherein said gatekeeper comprises or communicates with a digital

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watermark decoder to decode the digital watermark to determine the first identifier, and to interrogate the database with the first identifier to retrieve the security level.

4. The following is an examiner's statement of reasons for allowance of claims 26, 30, 32 and 34 in the amendment A of 10/12/2004: Nothing in the prior art anticipates or suggests, "a gatekeeper to regulate the flow of at least a first image between the first user terminal and the second user terminal, wherein the first image comprises at least a first digital watermark including a first identifier, said gatekeeper to determine a security level associated with the first image, compare the first image security level with a user security level, and to allow access by the second user terminal to the first image based on a result of the comparison, wherein said first image digital watermark includes security level data, and wherein said gatekeeper comprises or communicates with a digital watermark decoder to decode the digital watermark to determine the first identifier, and to interrogate the database with the first identifier to retrieve the security level" in a system comprising: a first user terminal, a second user terminal; a database, wherein the first user terminal and the second user terminal are in communication, and the first user terminal and the second user terminal are each in communication with the database; and a gatekeeper to regulate the flow of at least a first image between the first user terminal and the second user terminal, wherein the first image comprises at least a first digital watermark including a first identifier, said gatekeeper to determine a security level associated with the first image, compare the first image security level with a user security level, and to allow access by the second user terminal to the first image based on a result of the comparison, wherein said first image digital watermark includes security level data, and wherein said gatekeeper comprises or communicates with a digital watermark

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decoder to decode the digital watermark to determine the first identifier, and to interrogate the database with the first identifier to retrieve the security level.

5. The cited reference to Stefik U.S. Patent Number 6,233,684 have taught a Stefik teaches a system comprising a first user terminal such as *the user's computer or the authoring repository transacting with the on-line repository such as a remote internet server*; a second user terminal such as *the rendering repository such as the network printer server having access to the internet and transacting with the online repository such as a remote internet server*; a database such as *the publisher's repository or the online repository having a list of digital works or repository 101 containing a list of digital works*, wherein the first user terminal and the second user terminal are in communication, and the first user terminal and the second user terminal are each in communication with the database; a gatekeeper such as *the trust box, the repository 101, and/or the online distributor's repository in combination with the Credit Server and Billing Clearinghouse constitute a gatekeeper wherein the gatekeeper acts as an intermediary between the user's computer and the server printer*; to regulate the flow of at least a first image between the first user terminal such that *the digital work in an encrypted form at the user's computer or authoring repository 102* and the second user terminal, wherein the first image such as *the encrypted digital work comprises watermarks, by decrypting the digital work such as the first image*; *The set of usage rights associated with the same digital work having the watermark embedded in an encrypted form wherein the digital work having different levels of encryption and "scrambling"*; *comparing the watermark information in the consumer's digital certificate with the watermark information in the digital work identifying the usage rights*

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*wherein the trust box sets the security level; the digital work is then decrypted and the watermark font is downloaded to the server printer through the trust box so that the printer server is allowed to print the image for the given security level; Moreover, the printer server also keeps the transaction records; interrogating the publisher's or the online distributor's repository which encrypts the document using DES or some other encryption code and the encryption uses a key length that is compatible with requirements of security and legal constraints; and the distributor repository sends the encrypted document and the envelope containing the key along to the consumers workstation wherein the embedded data is extracted from the watermark and decoded. The data extracted is then used to identify who and where the unauthorized reproduction of the digital work came from. Moreover the consumer workstation has a program that decrypts the digital page and sends it to the printer with the watermarks through an intermediary such as the trust box wherein the printer server is allowed to print the image for the given security level and keeps a record of transaction with the consumer. However, Stefik failed to disclose the claim limitation of "security levels".*

6. The following is an examiner's statement of reasons for allowance of claim 35 in the amendment of 10/12/2004: Nothing in the prior art anticipates or suggests, "the second identifier is associated with the first identifier so that the first image and the second image are associated with one another" in an apparatus comprising: electronic processing circuitry; and memory, said memory comprising records stored therein, the records comprising a plurality of images, the plurality of images including a first image and a second image, wherein the first image includes a first identifier steganographically embedded therein, and wherein the second image includes a second identifier

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steganographically embedded therein, wherein the second image is derived from the first image, and wherein the second identifier is associated with the first identifier so that the first image and the second image are associated with one another.

7. The cited reference Zhao teaches a method for managing images, the images including a first image comprising a first identifier steganographically embedded therein. *Zhao teaches retrieving the digital representation with the first fingerprint watermark stored in work storage 105 wherein the digital representation has hierarchies of watermarks, making it possible to use the watermark with digital representations such as the JPEG encoding of images and the MPEG encoding of motion pictures which are subject to compression and other processing during transmission; the Examiner interprets the work storage storing the digital representations such as the JPEG encoded images as an image database. Zhao teaches removing all but the two most recent fingerprint watermarks when it stores the revised digital representation in work storage 105 and thereby altering the copy of the first image. Zhao teaches steganographically embedding a plurality of the encryption keys including the new and old public watermarks, and/or secret owner identifier watermarks, and/or two symmetrical keys, in the modified digital representation before distribution to a new user. However, Zhao failed to disclose the claim limitation of “the image database associates the second identifier with the first identifier so as to associate the first image and the second image”.*

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcw



**Kee M. Tung**  
**Primary Examiner**